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PTO-1390 (Rev. 07-2005)

Approved for use through 03/31/2007. OMB 0651-0021

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. ATTORNEY'S DOCKET NUMBER TRANSMITTAL LETTER TO THE UNITED STATES 64726(45710) DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. APPLICATION NO. (II known s PRIORITY DATE CLAIMED 37 CFR 1.5) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371** INTERNATIONAL FILING DATE INTERNATIONAL APPLICATION NO. PCT/EP2004/007155 1 July 2004 2 July 2003 TITLE OF INVENTION METHOD FOR CHANNEL ESTIMATION AND SYMBOL DETECTOR FOR OPTICAL RECEIVER APPLICANT(S) FOR DO/EO/US Stefan Langenbach et al. Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3 This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. is attached hereto. b. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). a. b. have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. C. d. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10 An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. 15. х A substitute specification. 16 A power of attorney and/or change of address letter. 17 A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825. 18. A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. A second copy of the English language translation of the international application under 35 U.S.C: 154(d)(4).

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PTO-1390 (Rev. 07-2005)

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U.S. APPLICATION NO. PCT/EP2004/007155				ATTORNEY'S DOCKET NUMBER 64726(45710)					
20. x Other items or information: International Search Report (3 pages)									
The following fees have been submitted					CAL	CALCULATIONS PTO USEON			
	-		a))		\$300	\$ 300.00			FIO OSLONET
						•			
22. x Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)					\$	200.0	0		
23. X Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)					\$ 500.00				
All Other Situation	TOTAL OF 21, 2			••••••		\$	1,000.0	0	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					<u> </u>				
Total Sheets	Extra Sheets		n additional 50 or fraction up to a whole number)		RATE				
- 100 =	/50 =				x \$250.00	\$			
			e, examination fee, or the e (37 CFR 1.492(h)).	oath	or declaration	\$			
CLAIMS	NU	MBER FILED	NUMBER EXTRA		RATE				
Total clair	ns	27 - 20 =	20 = 7 x		50.00	350.00			
Independent of	claims	4 - 3 =	-3 = 1 x		200.00		200.0	0	
MULTIPLE DEP	ENDENT CLAIM	S) (if applicable)		+				_	
			TOTAL OF A	ABOV	E CALCULATIONS =	\$ 1,550.00			
X Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.						775.00			
					SUBTOTAL =	\$	775.0	0	
	f \$130.00 for furn ate (37 CFR 1.49		ranslation later than 30 m	nonths	from the earliest	\$			
				TOT	AL NATIONAL FEE =	\$ 775.00			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property									
TOTAL FEES ENCLOSED =					\$			775.00	
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					Amount to be charged \$				

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Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038							
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been natified an granted to restore the International Application to pending status.							
	Olad Mille						
SEND ALL CORRESPONDENCE TO:	SIGNATURE						
Howard M. Gitten EDWARDS ANGELL PALMER & DODGE LLP	<u></u>						
P.O. Box 55874	Howard M. Gitten						
Boston, Massachusetts 02205 (954) 667-6130	NAME						
CUSTOMER NUMBER: 21874	32,138 REGISTRATION NUMBER						
	•						

IAP20 Rec'd PCT/PTO 30 DEC 2005

Application No. (if known): Not Yet Assigned

Attorney Docket No.: 64726(45710)

Certificate of Express Mailing Under 37 CFR 1.10

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MS PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

on	30 December 2005					
	Date					

	Signature Later				
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Priscilla I	Katon				
Typed or printed name of p	erson signing Certificate				
	(954) 727-2600				
Registration Number, if applicable	Telephone Number				

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Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

International Search Report (3 pages)

Substitute specification

Copy of International Application as filed

Transmittal Letter to the United States Designated-Elected Office

Fee Transmittal

Application Data Sheet (3 pages)

Charge \$775.00 to deposit account 04-1105

Approved for use through 7/31/2006. OMB 0651-0032
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Effective on 12/08/2004. Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). FEE TRANSMITTAL			818)	Application Num		plete if Known 27084			
			· -	Filing Date		Concurrently Herewith			
FOR FY 2005						Stefan Langenbach			
				Examiner Name		Not Yet Assigned			
X Applicant claims small entity status. See 37 CFR 1.27				Art Unit N/A					
TOTAL AMOUNT OF PAY	MENT	(\$) 775.00		Attorney Docket	No.	64726(45710)			
METHOD OF PAYMENT (check all that apply)									
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Check Credit Card Money Order Other (please identify): X Deposit Account Deposit Account Number: 04-1105 Deposit Account Name: Edwards Angell Palmer & Dodge LLP									
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FEE CALCULATION									
1. BASIC FILING, SEARCE	-		OF A	חטון ברבס		IATION FFF	•		
	FILIN	IG FEES Small Entity	SEA	RCH FEES Small Entity	EXAMIN	IATION FEES Small Entity			
Application Type	Fee (\$)		ee (\$)	Fee (\$)	Fee (\$)	Fee (\$)	Fees I	Paid (\$)	
Utility	300	150	500	250	200	100			
Design	200	100	100	50	130	65			
Plant	200	100	300	150	160	80			
Reissue	300	150	500	250	600	300			
Provisional	200	100	0	0	0	0			
2. EXCESS CLAIM FEES								Small Entity	
Fee Description					•		Fee (\$)	Fee (\$)	
Each claim over 20 (include	•	•					50	25	
Each independent claim ov	•	ng Reissues)					200 360	100 180	
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43 = 3. APPLICATION SIZE FE	<u> </u>								
If the specification and di		ed 100 sheets of r	aner (e	excluding electr	onically fil	led sequence or	computer		
listings under 37 CFR	1.52(e)), the	application size	ee due	is \$250 (\$125 f	or small er	ntity) for each a	dditional 5	0	
sheets or fraction there	of. See 35 l	. , , , ,							
	xtra Sheets			ditional 50 or frac			Fee	Paid (\$)	
- 100 = /50 (round up to a whole number) x =									
4. OTHER FEE(S) Non-English Specification, \$130 fee (no small entity discount)									
	urcharge): 2	631 Basic Natio	nal St	age fee				50.00	
2633 National Stage Examination Fee - all other 100.00									
2632 National Stage Search Fee - all other situations 250.00 2615 National Stage claims - extra total (over twenty) 175.00									
2614 National Stage claims - extra total (over twenty) 173.00 2614 National Stage claims - extra independent (over 100.00									
SUBMITTED BY									
Signature	10 et 11	1 8/45		Registration No. Attorney/Agent)	32,138	Telephone	(954) 66	7-6130	
- VI	M. Gitten		1.	, morneyingelit)	-	Date [December		
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Dated: December 30, 2005 Signature: Sais Wa Latar (Priscilla Katon)									
Dated, December 30, 2003 Signature. Was a Company (Friscalia Nation)									